

Immigration, Language,
and Ethnicity

Canada and the
United States

Barry R. Chiswick, Editor

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dian population."³⁰ About one-fifth of Canada's annual population growth may now be attributed to immigration.

Potentially, immigration fuels population growth in two ways: first, by the addition of the immigrants themselves; second, by the addition of their children. The data in this paper suggest that most immigrants have rather low fertility, and that this finding is robust over several censuses. If the demographic objective gains a high priority, then increasing the number of immigrants appears to be a more successful strategy than relying on their subsequent fertility. The alternative—seeking high-fertility populations to immigrate—is unlikely to succeed because of the rapid convergence of fertility norms among the native-born and the foreign-born.

However the demographic objective is achieved, Canada's already multicultural society seems destined to encompass even greater diversity.

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Wage Rates of Immigrant and Native Men in Canada and the United States

Alice Nakamura and Masao Nakamura

Many would argue that national and regional economic objectives have shaped Canadian immigration policies more explicitly than U.S. policies. Policy history in the two countries is dealt with in other chapters in this volume. Here we simply draw attention to a recent manifestation of the Canadian economic emphasis that has attracted interest in the United States.

Beginning in 1967, independent applicants for immigration to Canada were systematically evaluated on a point system that reflected perceived needs for labor. Points were awarded on the basis of job-related qualifications such as English or French language proficiency, education, employment experience, and job skills, and the match between an applicant's qualifications and labor needs in Canada—both in the nation as a whole and in the region where the would-be immigrant wished to settle.

American employers have sometimes recruited abroad to meet labor needs. In the United States as in Canada, the perceived potential for fitting into society and finding work is a factor considered in ruling on the applications of independent immigrants. But U.S. immigration policies have not required a would-be immigrant's economic qualifications to be judged as explicitly as Canadian policies have. Also, in relative terms, the United States has admitted larger numbers of immigrants as refugees or for family reunification.

These differences in emphasis between Canadian and U.S. immigration policies are frequently cited in immigration policy discussions in the two countries. In the United States, recent indications of decline in the "quality" of immigrants and concern about productivity have led to suggestions that U.S. immigration policies be revamped along Canadian lines. Despite interest in the differences between the

immigration policies of the two countries, however, we know of no comparative studies that quantitatively examine the differences in the outcomes of these policies. Public interest in intercountry policy differences clearly stems from expectations of differing outcomes. The purpose of this study is to begin to fill the gap in the understanding needed to examine the relative strengths of U.S. and Canadian immigration policies.

Our research approach is outlined in the following section. In the subsequent sections we discuss data sources and variable definitions, empirical results, and finally, findings and conclusions.

Research Strategy

Does evidence suggest that, on average, immigrants to Canada are better suited to contribute to the economy than are immigrants to the United States? In appraising the economic effectiveness of Canadian versus U.S. immigration policies, this question is central.

Immigrants can contribute to the economy of the receiving country in two basic ways. First, they may have more human capital than native workers. Second, the job specializations of immigrants may meet specific occupational or regional labor needs. In other words, immigrants can serve to raise the general skill level of the work force, or they can help to relieve labor bottlenecks.

A comparison between aspects of the human capital endowments of Canadian immigrant workers and those of U.S. immigrant workers is relatively straightforward. But how can the match between immigrant workers and labor needs be judged?

One approach pursued in this study is to compare the average wage rates for immigrant versus native workers. This comparison is made for workers in all occupations, and then for selected occupational groups. The motivation for making these average wage comparisons is that immigration policies that result in better matches between the qualifications of those admitted and labor needs should make it easier for immigrants to find jobs that pay well and have good future earnings prospects.

Of course, simple averages of immigrant and native wage rates take no account of differences in worker characteristics, such as years of schooling or years of work experience, although both the average levels and the distributions of these characteristics may differ greatly between immigrant and native workers. Our approach to this problem is to compare the Canadian and U.S. coefficient estimates for such variables as years of schooling in multiple regression equations for the (natural logarithm of the) hourly wage rate. The coefficient of

each variable in a multiple regression can be interpreted as the expected change in the dependent variable due to a unit change in the associated explanatory variable—controlling for the effects of all other explanatory variables included in the regression equation.

Evidence that immigrants to Canada are economically more successful than immigrants to the United States would suggest—but not conclusively prove—that Canadian immigration policies are more effective in an economic sense. Both selection and retention issues complicate the interpretation of empirical findings.

The actual composition of immigrant flows into a country depends not only on the criteria for approving immigrants, but also on the types of people who apply to enter. The United States is thought to be the country of first choice for many international migrants, and Canada a common second choice when approval of immigration to the United States is denied or deemed unlikely. Hence it is possible that Canadian immigration policies can be effective in promoting the selection of immigrants who can contribute to the economy, and yet that immigrants to Canada are less desirable from this perspective than the immigrants to the United States.¹

Furthermore, immigrants do not necessarily remain in the countries to which they are admitted as residents. Possibly, Canadian immigration policies have resulted in an influx of immigrants who are truly better qualified from an economic perspective than are the immigrants admitted to the United States. But successful immigrants who came to Canada may tend to emigrate elsewhere, such as to the United States.

Data Sources and Variable Definitions

Our empirical analyses are based on census of population data. In particular, we use microdata for immigrant and native working men twenty-five to fifty-five years of age, from the 2 percent 1981 Canadian Census Public Use Sample Individual File and from the 0.1 percent 1980 U.S. Census Public Use Microdata Sample A.

The variables used in this study are listed in table 5-1, together with their definitions. Most of the variables have been used in other single-country studies of immigrant wage rates or earnings. We will briefly review the definitions of the commonly used variables, and introduce two labor market variables that have not been used in other studies.

The variable that is the focus of much of this study, and the dependent variable (in logarithm form) for our multiple regression equations, is the Hourly Wage Rate. Values for this variable were

TABLE 5-1
DEFINITIONS OF THE VARIABLES USED IN THIS CHAPTER

<i>Variable Name</i>	<i>Definition</i>
Hourly Wage Rate	Hourly wage rates are computed as reported earnings for the previous calendar year, divided by weeks of work in that year times a measure of hours of work per week
Years of Schooling Potential Experience	Number of grades completed Age minus Years of Schooling minus 6
Potential Experience Squared	Squared values of the Potential Experience variable
Disability Dummy	A dummy variable equal to 1 if a person has a disability limiting work, and equal to 0 otherwise ^a
Marriage Dummy	A dummy variable equal to 1 if a person is legally married with spouse present, and equal to 0 otherwise
Language Problems Dummy	A dummy variable equal to 1 if an immigrant to the U.S. indicates difficulty with English, or for residents of Canada with a primary language other than the main language for the province of residence ^b
Entry Unemployment Rate	The national unemployment rate at the expected time of entry into the Canadian or U.S. labor force, or the average national unemployment rate for the period of entry
Average Local Wage	Computed using Hourly Wage Rate figures for all male workers 25-55 years of age, grouped by state and urban status ^c for the U.S., and by province and place of residence ^d for Canada

a. Included only for the United States.

b. French for Quebec, English otherwise.

c. Central SMSA areas; other, for U.S.

d. Census Metropolitan Area; other, for Canada.

SOURCE: Author.

calculated as reported earnings for the previous calendar year divided by the product of weeks of work for that year and a measure of hours worked per week. Qualitatively similar results to those reported in this chapter were also obtained using weekly earnings or annual earnings as the indicator of economic success. The remaining variables listed in table 5-1 are the explanatory variables included in our multiple regression equations.

Neither immigration officials nor economists can directly measure the accumulated job related human capital of individuals. They must instead use as proxies measures of time spent in activities believed to produce human capital. The proxy measures for human capital used in this study are Years of Schooling, Potential Experience, and Potential Experience Squared.

For Canadian immigrant and native workers, our Years of Schooling variable was assigned values based on two Public Use Sample variables: first, "Highest Grade of Elementary or Secondary," and second, "Years of University." The first of these variables provides information on the highest grade of elementary or secondary school attended (less than grade 5; grades 5-8; grades 9, 10, 11, 12, 13). A value of 2.5 was assigned for individuals who reported having attended less than grade 5, and a value of 6.5 was assigned for those with reported years of schooling falling in the category of grades 5-8. The "Years of University" variable gives the total number of completed years of education at degree-granting educational institutions (none; less than one year; one year; and so on, up to six years or more). For each Canadian worker, the value for this variable was added to the value already determined for elementary and secondary education, with 0.5 and 6 used, respectively, for individuals with values of less than one year or six years or more for the Years of University variable.

For U.S. immigrant and native workers, the assigned values for our Years of Schooling variable are based on the person-record variable, "Highest Year of School Attended." The "Highest Year of School Attended" is coded 03 through 14 for the first through the twelfth grades, and 15 through 22 for the first through the "eighth year or more" of college. The values assigned to our Years of Schooling variable are these public-use microdata code values minus two.

Our data sources contain no information about years of work experience. Most men enter the work force right after finishing their formal schooling, however, and they continue to work year after year from that time until retirement. Hence labor economists often construct a Potential Experience variable. As is common in labor economics studies, our Potential Experience variable is defined as a worker's

reported age minus Years of Schooling minus six, to account for the pre-grade 1 years. It is expected that wage rates rise throughout the earlier years of most workers' lives, but that beyond some point reduced energy levels and health problems associated with advancing age cause wage rates to plateau and finally to decline with further increases in Potential Experience. In order to allow for this expected nonlinear response, Potential Experience Squared is also included in our regression equations.

Three dummy variables have been included in our regression equations to control for attributes found to be important in other studies of immigrant earnings. (A dummy variable takes the value of 1 when some stated condition holds, and the value of 0 otherwise.) The first of these is a Disability Dummy, which equals 1 for individuals with a disability limiting work; this is available for the United States only. The second is a Marriage Dummy, which equals 1 for individuals reported to be currently married. The third is a Language Problems Dummy. The Language Problems Dummy equals 1 for immigrants to the United States reporting difficulty with English, and also for immigrants and for native workers in Canada whose primary home language is not the main language for the province where they claim to live (French for Quebec, English for the other provinces).

In much of the literature on the economic success of immigrants, the focus is on the individual qualifications, motivations, and choices of the immigrants themselves versus native-born workers.² Of course, this personal characteristics orientation is also prevalent in much of the rest of the empirical literature on individual work behavior and earnings.³ One reason for this is that the microdata sets on which these studies are based contain little information about employer and labor market attributes. No employer or labor market attributes are given in the microdata sources on which this study is based, either. But we have added two labor market variables to the microdata records.

The first of these variables is the Entry Unemployment Rate, which is the national unemployment rate for the expected year of entry into the Canadian or U.S. labor market. Values for this variable were assigned as follows. For each immigrant and each native worker, we first determined the age of expected entrance into the labor force as the person's current age minus years of potential experience. The age of expected labor market entrance was used to determine the year of expected labor market entrance. For native workers, the Entry Unemployment Rate is the national unemployment rate in the year of expected labor market entrance.

In the Canadian Public Use Sample data, the following years of

periods of arrival for immigrants are distinguished: before 1946, 1946–1955, 1956–1960, 1961–1965, 1966, 1967–1970, and single years of arrival for 1971–1981. In the U.S. Public Use Microdata Sample, the arrival times that are distinguished are: before 1950, 1950–1959, 1960–1964, 1965–1969, 1970–1974, and 1975–1980.

For each immigrant whose arrival year or period is prior to the year of expected labor market entrance, the value of the Entry Unemployment Rate variable was assigned in the same way as for native workers. Immigrants whose time of arrival is prior to the expected year of entrance into the labor market probably have had a period of acculturation, and may even have attended school in their new country, prior to looking for a first job. Kossoudji calls these immigrants "child migrants," and finds that their job and earnings experiences differ in important ways from the experiences of immigrants who entered the work force prior to or at the time of arrival in the United States.⁴ We refer to the other immigrants as adult-at-entry immigrants. For each adult-at-entry immigrant, the value for the Entry Unemployment Rate variable is the national unemployment rate for the year of arrival—or the average of the national unemployment rates over the reported period of arrival. The national unemployment rate figures used in assigning values to the Entry Unemployment Rate variable are shown in table 5–2.

The second labor market variable included in this study is the (natural logarithm of the) average hourly wage rates for all male workers in each province (for Canada) or state (for the United States) and place of residence.⁵ Studies of where immigrants live reveal that the geographical distribution for immigrants is quite different than that for native workers.⁶ Wage levels differ from place to place. Some of this variation may reflect differences in the local cost of living. The types of jobs available in different localities are undoubtedly another factor reflected in regional wage differences.

In this study, we are interested in investigating the match between immigrant job skills and labor needs. From this perspective, it seems desirable to examine immigrant versus native wage rates, controlling for wage levels in the places where these individuals live. For example, an immigrant doctor or lawyer or businessman might play an important role in the economic life of a small urban center and be well paid in this context; yet this immigrant might earn less than an immigrant in the same line of work in a high-priced, major urban center. In the major urban center the earnings of immigrants in the given line of work may be fairly low in comparison with native workers because of an oversupply of workers of this sort. In this example, the immigrant filling a needed professional role in the small

TABLE 5-2
UNEMPLOYMENT RATES FOR THE UNITED STATES AND CANADA,
1945-1980

	U.S.	Canada		U.S.	Canada
1945	1.9	3.4	1965	4.5	3.9
1946	3.9	3.4	1966	3.8	3.6
1947	3.9	2.3	1967	3.8	4.1
1948	3.8	2.3	1968	3.6	4.8
1949	5.9	2.8	1969	3.5	4.7
1950	5.3	3.6	1970	4.9	5.9
1951	3.3	2.4	1971	5.9	6.4
1952	3.0	2.9	1972	5.6	6.3
1953	2.9	3.0	1973	4.9	5.6
1954	5.5	4.6	1974	5.6	5.4
1955	4.4	4.4	1975	8.5	6.9
1956	4.1	3.4	1976	7.7	7.1
1957	4.3	4.6	1977	7.0	8.1
1958	6.8	7.0	1978	6.0	8.4
1959	5.5	6.0	1979	5.8	7.4
1960	5.5	7.0	1980	—	7.5
1961	6.7	7.1			
1962	5.5	5.9			
1963	5.7	5.5			
1964	5.2	4.7			

SOURCE: Figures for 1945-1970 for the U.S. are from *Long-Term Economic Growth, 1860-1970*, series B2; figures for 1971-1979 for the U.S. are from table B-29 of the Economic Report of the President, 1980; and figures for Canada are from various issues of the *Canada Year Book*.

urban center would be viewed as better matched to the labor needs of the economy, and this would be evident from his wage rate relative to (or controlling for) the average wage level in his place of residence.

Empirical Analysis

The coefficient estimates for two of the explanatory variables included in our multiple regressions will be examined for evidence concerning the closeness of the match between immigrant qualifications and labor needs. These two variables are the Years of Schooling and the Entry Unemployment Rate variable.

The coefficients for the Years of Schooling variable included in our regression equations can be viewed as estimates of the rate of return to years of schooling. These estimates provide the basis for comparisons of the rates of return on schooling for immigrant versus native workers in the two countries. Immigrants who are better matched to labor needs should have an easier time than native workers in finding jobs that provide favorable returns on years of schooling.

The Entry Unemployment Rate variable is treated as an indicator of labor market conditions at the time when an immigrant or native worker first entered the labor market in the designated country.

Other studies offer evidence that the career opportunities and lifetime earnings profiles of native workers are affected by labor market conditions at the time of initial entry into the labor force.⁷ We would expect effects of this sort to be even more severe for immigrants. Immigrant workers are less likely to have the information and contacts that become more important for finding good jobs as jobs become more scarce. Also, employers may be uncertain about the value of education and job experience obtained in other countries. Hence they may prefer native workers, even those with somewhat poor formal qualifications, so long as native workers are available.

Human Capital of Immigrant versus Native Workers. The Kossoudji study finds important differences in the economic experience of child versus adult-at-entry immigrants.⁸ Thus we show separate results throughout for all immigrants and for the adult-at-entry immigrants. In this particular study, we find no important differences in the results for all immigrants versus the adult-at-entry subgroup. This similarity could not have been foretold, however, without examining the empirical results. Separate results are also presented for workers in seven occupations, which are listed alphabetically in table 5-3. Sample sizes are given in table 5-3 for the different immigration-status and occupational-specific data samples for which results are shown in the remaining tables in this chapter.

Average values are shown in table 5-4 for our Age and Potential Experience variables. Columns 3 and 6 of the top panel of table 5-4 show that the average age for native male workers is somewhat younger in Canada than in the United States. But from columns 1 versus 4 and columns 2 versus 5 we find that the immigrant workers in Canada are older on average than the immigrant workers in the United States.

Average values for Years of Schooling are shown in the bottom panel of table 5-5. From columns 1, 2, and 3 versus 4, 5, and 6 of the bottom panel of this table, we see that both immigrant and native

workers in Canada have less schooling on average than their U.S. counterparts. The Average Potential Experience values shown in the bottom panel of table 5-4 reflect the average age and schooling patterns, as would be expected given how Potential Experience is defined. Native workers have slightly more and immigrant workers considerably more years of Potential Experience in Canada than in the United States.

From the evidence discussed so far, it is unclear whether immigrant workers in Canada have more job-related human capital than immigrant workers in the United States. On average, the immigrant workers in Canada are less educated but are older and probably have worked more years than the immigrant workers in the United States. Some additional observations, however, can be made based on the figures in table 5-5, and these figures may be relevant in appraising Canadian immigration policies. In particular, for all occupations and for each of the specific occupations listed except health, immigrant workers in Canada have higher average levels of education in comparison with native workers than is the case for immigrant workers in the United States. In fact, immigrant workers in Canada actually have more years of schooling on average than native workers for all but one of the separate occupations; for the United States, this is true only for the health and teaching occupations. This pattern could be evidence of the success of immigration policies in Canada in fulfilling their purpose of ensuring an influx of immigrants who will enhance the productive capacity of the Canadian economy. Or it could mean that, as the preferred destination second to the United States of many international migrants, Canada is selecting its immigrants from an applicant pool that on average has somewhat less formal education than the applicant pool for the United States—although it is well educated in comparison with the native Canadian work force. If this is the case, immigrant-native patterns for average years of schooling might still be similar to those evident in table 5-5, even if exactly the same policies for selecting immigrants had been applied in both the United States and Canada.

Looking now at the multiple regression coefficient estimates for the Years of Schooling variable shown in the top panel of table 5-5, we find as expected that the estimated rates of return on education are lower, as expected, for immigrant than for native workers. We do not find, however, that the rates of return for Canadian immigrants are higher than for U.S. immigrants, either in absolute terms or relative to native workers in each country, as might be expected if the Canadian aims of matching immigrant qualification to labor needs have been successfully met.

TABLE 5-3
NUMBERS USED IN SAMPLES IN THIS CHAPTER

	Canada			United States		
	Adult-at-entry immigrants	All immigrants	Native workers	Adult-at-entry immigrants	All immigrants	Native workers
All	11,961	16,652	19,680 ^a	1,944	2,628	34,221
Clerical	664	955	4,066	121	173	2,344
Health	191	281	849	51	85	526
Managerial	1,078	1,821	7,422	183	288	4,853
Operative	2,685	3,261	7,787	289	334	3,169
Sales	801	1,296	6,085	92	142	2,829
Service	1,195	1,529	4,591	235	286	2,382
Teaching	383	745	2,587	30	57	1,136

a. The 1981 Canadian Census Public Use Sample Individual File used in this study contains 59,039 records, with information for all of our variables, for working men 25-55 years of age. All the records falling into the designated occupational groups (clerical, health, and so forth) were utilized in our analyses. For "all" occupations, however, we used a random one-third sample of the available 59,039 usable records.
SOURCE: See the text.

TABLE 5-4: AVERAGE AGE AND POTENTIAL EXPERIENCE, WORKING MEN 25-55 YEARS OF AGE, IN YEARS

	Canada ^a			United States ^b		
	Adult-at-entry immigrants	All immigrants	Native workers	Adult-at-entry immigrants	All immigrants	Native workers
	Age					
All	41.5 (8.3)	39.6 (8.5)	37.1 (8.7)	39.3 (8.7)	37.7 (8.6)	37.7 (9.0)
Teaching	43.2 (6.8)	40.0 (7.6)	36.7 (7.2)	39.0 (7.5)	37.8 (7.9)	37.3 (8.3)
Managerial	42.8 (7.7)	40.3 (8.1)	38.7 (8.3)	41.8 (7.9)	39.3 (8.1)	39.1 (8.8)
Service	41.3 (8.0)	39.8 (8.9)	37.6 (8.9)	38.6 (8.8)	37.1 (8.8)	37.7 (9.3)
Sales	41.3 (8.0)	38.9 (8.3)	37.3 (8.8)	37.7 (8.2)	36.7 (7.9)	37.9 (9.0)
Operative	40.8 (8.5)	39.5 (8.6)	36.7 (8.7)	38.7 (8.6)	37.7 (8.7)	36.7 (8.8)
Clerical	40.7 (8.9)	38.3 (9.0)	36.6 (9.1)	38.7 (8.9)	36.5 (8.8)	37.9 (9.1)
Health	40.6 (7.6)	39.0 (8.0)	35.5 (8.3)	38.7 (7.2)	37.1 (7.4)	36.2 (8.4)

Potential Experience^c

All	24.3 (9.8)	21.7 (10.2)	19.5 (10.2)	21.9 (9.8)	19.4 (10.1)	18.5 (10.0)
Service	25.8 (10.1)	23.7 (10.5)	20.8 (10.4)	22.5 (10.1)	20.4 (10.5)	13.4 (10.6)
Operative	24.5 (9.7)	23.1 (9.8)	20.6 (10.0)	23.3 (9.6)	22.0 (9.9)	19.3 (9.8)
Sales	23.0 (9.2)	20.3 (9.4)	19.4 (9.9)	19.0 (9.3)	17.0 (8.9)	18.1 (9.8)
Managerial	23.0 (8.9)	20.0 (9.2)	19.0 (9.4)	21.3 (9.0)	18.4 (9.0)	18.2 (9.4)
Clerical	22.6 (10.2)	19.9 (10.3)	18.9 (10.3)	19.5 (9.1)	16.9 (9.2)	18.5 (10.0)
Teaching	19.9 (7.3)	16.5 (8.0)	13.9 (7.7)	15.1 (7.6)	13.4 (7.9)	13.8 (8.3)
Health	19.6 (9.0)	17.3 (9.3)	15.2 (9.5)	13.9 (7.9)	12.1 (7.8)	12.6 (8.9)

NOTE: Standard deviations are given in parentheses.

a. 1981 census.

b. 1980 census.

c. Potential Experience is defined as a worker's reported age minus years of schooling minus six.
SOURCE: See Data Sources and Variable Definitions section of text.

TABLE 5-5: COEFFICIENT ESTIMATES AND MEAN VALUES FOR YEARS OF SCHOOLING, WORKING MEN 25-55 YEARS OF AGE

	Canada ^a			United States ^b		
	Adult-at-entry immigrants	All immigrants	Native workers	Adult-at-entry immigrants	All immigrants	Native workers
	Coefficient estimates					
All	.032 ^c (.002)	.038 ^c (.002)	.048 ^c (.002)	.035 ^c (.005)	.042 ^c (.004)	.058 ^c (.001)
Health	.044 ^d (.018)	.031 ^d (.014)	.034 ^c (.010)	.143 ^c (.026)	.131 ^c (.023)	.104 ^c (.017)
Teaching	.035 ^c (.013)	.053 ^c (.011)	.046 ^c (.005)	.129 ^c (.048)	.093 ^d (.045)	.058 ^c (.009)
Managerial	.028 ^c (.007)	.043 ^c (.005)	.056 ^c (.002)	.056 ^c (.019)	.044 ^c (.015)	.066 ^c (.004)
Clerical	.016 ^e (.009)	.015 ^d (.008)	.027 ^c (.005)	.005 (.018)	.015 (.017)	.045 ^c (.006)
Sales	.015 ^e (.009)	.018 ^d (.007)	.045 ^c (.004)	.054 ^e (.033)	.070 ^e (.029)	.066 ^c (.006)
Service	.015 ^d (.007)	.021 ^c (.007)	.043 ^c (.005)	.021 (.018)	.019 (.018)	.041 ^c (.006)
Operative	.013 ^c (.005)	.014 ^c (.005)	.027 ^c (.005)	.003 (.015)	.009 (.014)	.057 ^c (.007)

Mean values

All	11.2 (4.2)	11.9 (4.1)	11.6 (3.5)	11.2 (5.0)	12.2 (4.9)	13.2 (3.1)
Health	15.1 (3.9)	15.7 (3.7)	14.2 (3.8)	18.8 (2.1)	19.0 (1.8)	17.6 (2.8)
Teaching	17.3 (2.5)	17.5 (2.1)	16.7 (2.3)	17.9 (2.0)	18.4 (1.9)	17.5 (2.1)
Managerial	13.7 (3.4)	14.3 (3.3)	13.7 (3.2)	14.4 (3.8)	14.9 (3.4)	14.9 (2.6)
Clerical	12.1 (3.5)	12.4 (3.3)	11.6 (2.6)	13.1 (4.0)	13.5 (3.6)	13.4 (2.5)
Sales	12.3 (3.3)	12.7 (3.2)	11.9 (2.7)	12.7 (3.7)	13.6 (3.4)	13.9 (2.5)
Service	9.5 (3.6)	10.1 (3.6)	10.8 (3.6)	9.8 (4.5)	10.5 (4.5)	12.3 (2.8)
Operative	10.2 (3.3)	10.4 (3.2)	10.1 (2.4)	9.0 (4.3)	9.4 (4.3)	11.4 (2.4)

NOTE: Standard deviations are given in parentheses. For the coefficient estimates shown in the top panel, the standard deviations are heteroskedasticity-corrected. Coefficient estimates that are significant with 99, 95, and 80 percent levels of confidence using a two-tailed t-test are denoted, respectively, with the superscripts c, d, and e.

a. 1981 census.

b. 1980 census.

SOURCE: See Data Sources and Variable Definitions section of text.

Hourly Wage Rates. Admitting immigrants who are well educated in comparison with the native-born population does not necessarily mean that these immigrants will enhance the economic growth of the receiving country. The skills these immigrants have may not be in demand. Also, observable proxy indicators for accumulated human capital, such as years of schooling, may overstate the qualifications of immigrant versus native workers because of systematic differences in unmeasured factors such as the quality of education. A more direct indicator of the economic contribution of immigrants to the receiving country is the relationship between the incomes of immigrant workers and native workers.

Average hourly wage rates for immigrant and native workers are shown in the top panel of table 5-6. The Canadian figures are in Canadian dollars and the U.S. figures are in U.S. dollars; hence the figures in table 5-6 are not an appropriate basis for making direct intercountry wage comparisons. These figures can be used, however, for making Canadian-U.S. comparisons between the relationships of immigrant to native wage rates. Ratios of the average wage rates of immigrant versus native workers are shown in the bottom panel of table 5-6. The pattern of values is interesting.

Looking at the top line in the bottom panel of table 5-6, for all occupations it can be seen that immigrant workers in Canada have a slightly higher average wage than the native workers, while immigrant workers in the United States have an average wage that is 5 percent to 9 percent lower than for native workers. This suggests that the relatively high levels of schooling of immigrant versus native workers in Canada is of value and is being actively utilized in the Canadian economy.

The occupations for which figures are shown in table 5-6 are arranged in that table according to the average wage rates, from highest to lowest, for adult-at-entry immigrants to Canada. The ordering of these occupations would be the same if it were based on all immigrants or on native workers in Canada, but it would be considerably different if it were based on U.S. average wage figures. Nevertheless, for the United States as for Canada, the teaching, managerial, health, and sales occupations have higher average wage rates, for immigrant and native workers alike, than have the operative, clerical, and service occupations.

From the bottom panel of table 5-6, we see that in the better paid occupations in both Canada and the United States immigrant workers have higher average wage rates than natives have. In fact, for the United States the ratios shown in the bottom panel are generally

greater than those for the better paid teaching, managerial, health, and sales occupations, and they are generally less than those for the more poorly paid operative, clerical, and service occupations.

Entry Unemployment Rate. Finally, coefficient estimates and mean values are shown in table 5-7 for the Entry Unemployment Rate variable. For Canada, the immigrant versus the native worker coefficient values display the pattern that was expected: the immigrant coefficient estimates are more negative, except for the managerial group. This expected pattern is less evident for the United States, perhaps due both to smaller sample sizes and to the fact that the available information about the year of arrival is much less precise for the U.S. than for the Canadian immigrants.

Recall that for the United States, only six intervals for time of arrival are distinguished: before 1950, 1950-1959, 1960-1964, 1965-1969, 1970-1974, and 1975-1980. For Canada, on the other hand, seventeen time-of-arrival periods or years are distinguished: before 1946, 1946-1955, 1956-1960, 1961-1965, 1966, 1967-1970, and single years of arrival for 1971-1981. Perhaps this is also why no clear patterns of Canadian-U.S. differences emerge from table 5-7. Our expectation had been that the coefficient estimates for the Entry Unemployment Rate variable would be less negative for Canada than for the United States, because of immigration policies in Canada that are intended to admit immigrants with good job prospects. Instead, we find that the all-occupations figures in the top row of table 5-7 are remarkably similar for the United States and for Canada.

Findings and Conclusions

We have found that, on average, the hourly wage rates of immigrant workers as compared with native workers in Canada are higher than is the case in the United States. This is consistent with our finding that, compared with the native populations, immigrant workers in Canada have more education on average than is true for immigrant workers in the United States.

In Canada, as in the United States, immigrant workers earn lower rates of return on their years of schooling than native workers earn. We find no evidence, however, that this rate-of-return disadvantage is less severe for Canada than for the United States. Nor are the estimated levels for the rates of return on Years of Schooling higher for Canadian than for U.S. working immigrants.

Finally, we find that higher Entry Unemployment Rate values do

TABLE 5-6: AVERAGE HOURLY WAGE RATES AND IMMIGRANT-TO-NATIVE RATIOS OF THESE AVERAGES,
WORKING MEN 25-55 YEARS OF AGE

	Canada ^a				United States ^b			
	Adult-at-entry immigrants	All immigrants	Native workers	Average hourly wage ^c	Adult-at-entry immigrants	All immigrants	Native workers	
All	11.35 (15.46)	11.51 (15.34)	11.02 (10.50)	8.50 (8.96)	8.86 (8.98)	9.34 (12.97)		
Teaching	16.51 (12.25)	15.78 (14.90)	15.69 (40.25)	11.58 (9.12)	11.72 (8.97)	9.97 (8.10)		
Managerial	14.66 (10.70)	14.74 (12.77)	14.32 (9.11)	11.91 (9.89)	11.59 (9.18)	11.87 (17.84)		
Health	12.73 (9.22)	12.14 (9.36)	11.22 (11.32)	15.14 (10.30)	14.79 (10.10)	13.09 (27.27)		
Sales	11.65 (27.07)	11.16 (21.76)	10.78 (11.22)	11.69 (20.93)	11.13 (17.29)	9.58 (7.84)		
Operative	10.28 (14.07)	10.42 (15.90)	10.19 (16.98)	6.74 (5.81)	6.87 (6.04)	8.28 (12.16)		
Clerical	9.26 (7.73)	9.23 (6.90)	9.25 (5.14)	7.96 (6.07)	8.65 (8.90)	8.54 (6.84)		
Service	7.84 (7.88)	8.04 (7.94)	9.41 (7.40)	5.51 (6.90)	6.09 (7.93)	7.72 (15.96)		
				<i>Ratios of the immigrant to the native figures</i>				
All	1.03	1.04	1.01	.91	.95			
Teaching	1.05	1.01	1.01	1.16	1.18			
Managerial	1.02	1.03	1.03	1.00	.98			
Health	1.13	1.08	1.08	1.16	1.13			
Sales	1.08	1.04	1.04	1.22	1.16			
Operative	1.01	1.02	1.02	.81	.83			
Clerical	1.00	1.00	1.00	.93	1.01			
Service	.83	.85		.71	.79			

NOTE: Standard deviations are given in parentheses.

a. 1981 census.

b. 1980 census.

c. In Canadian dollars for Canada and U.S. dollars for United States.

SOURCE: See Data Sources and Variable Definitions section of text.

TABLE 5-7: COEFFICIENT ESTIMATES AND MEAN VALUES FOR ENTRY-UNEMPLOYMENT-RATE VARIABLE,
WORKING MEN 25-55 YEARS OF AGE

	Canada ^a			United States ^b		
	Adult-at-entry immigrants	All immigrants	Native workers	Adult-at-entry immigrants	All immigrants	Native workers
	<i>Coefficient estimates</i>					
All	-.047 ^c (.005)	-.044 ^c (.004)	-.011 ^d (.004)	-.055 ^c (.016)	-.043 ^c (.013)	-.010 ^c (.003)
Health	-.076 ^e (.051)	-.061 ^e (.044)	-.037 ^e (.025)	-.181 ^d (.088)	-.077 ^e (.059)	-.017 (.027)
Clerical	-.072 ^c (.021)	-.069 ^c (.017)	-.006 (.008)	-.107 ^d (.050)	-.061 ^e (.041)	.011 (.012)
Teaching	-.063 ^d (.028)	-.032 ^e (.020)	-.025 ^d (.011)	-.012 (.105)	-.122 ^e (.073)	-.013 (.014)
Operative	-.046 ^c (.011)	-.047 ^c (.010)	-.017 ^d (.007)	-.062 ^e (.046)	-.037 (.040)	-.009 (.011)
Service	-.029 ^c (.017)	-.032 ^c (.015)	-.016 ^d (.009)	.002 (.050)	-.033 (.040)	-.027 ^d (.014)
Sales	-.050 ^d (.023)	-.040 ^d (.017)	-.008 (.008)	-.023 (.073)	.035 (.051)	.002 (.012)
Managerial	.000 (.016)	-.017 ^e (.011)	-.020 ^c (.006)	.062 (.054)	-.002 (.038)	-.006 (.008)
	<i>Mean values</i>					
All	5.39 (1.41)	5.41 (1.41)	4.85 (1.72)	5.47 (1.17)	5.37 (1.18)	4.77 (1.17)
Health	5.78 (1.23)	5.84 (1.28)	5.47 (1.65)	5.53 (1.23)	5.47 (1.19)	5.27 (1.38)
Clerical	5.51 (1.48)	5.56 (1.45)	4.88 (1.70)	5.65 (1.20)	5.51 (1.26)	4.75 (1.15)
Teaching	5.46 (1.13)	5.56 (1.24)	5.61 (1.45)	5.56 (1.25)	5.51 (1.22)	5.15 (1.32)
Operative	5.44 (1.42)	5.41 (1.40)	4.66 (1.66)	5.51 (1.15)	5.42 (1.16)	4.71 (1.07)
Service	5.44 (1.43)	5.40 (1.45)	4.64 (1.74)	5.60 (1.20)	5.51 (1.24)	4.72 (1.15)
Sales	5.39 (1.44)	5.36 (1.45)	4.88 (1.69)	5.48 (1.17)	5.36 (1.21)	4.82 (1.20)
Managerial	5.29 (1.39)	5.32 (1.40)	5.00 (1.65)	5.39 (1.11)	5.27 (1.17)	4.82 (1.22)

NOTE: Standard deviations are given in parentheses. For the coefficient estimates shown in the top panel, the standard deviations are heteroskedasticity-corrected. Coefficient estimates that are significant with 99, 95, and 80 percent levels of confidence using a two-tailed t-test are denoted, respectively, with the superscripts c, d, and e.

a. 1981 census.

b. 1980 census.

SOURCE: See Data Sources and Variable Definitions section of text.

reduce the expected current wage rates for workers, with this effect being more severe for immigrant than for native workers. No Canada-U.S. patterns have been detected in the coefficient estimates for the Entry Unemployment Rate variable, however. In particular, we are not able to show that the negative effects on current wage rates associated with the Entry Unemployment Rate variable are more severe for U.S. than for Canadian immigrants.

We do not have clear-cut evidence that Canadian immigration policies have been more effective than U.S. policies from an economic perspective. But we hope that our methodology and results will be helpful to other researchers in pursuing the understanding needed for informed policy making in this area. The difficulty of obtaining evidence of the superior performance of the Canadian policies suggests, in the meantime, that there may not be a compelling immediate need to increase the emphasis on economic factors in U.S. immigration policies.